## A.4.7 Advanced Composition Explorer (ACE) Guest Investigator Program

### 1. Scope of Program

Proposers interested in submitting in response to this program element should also read Section A.4.0 of this Appendix for an overview of The Sun-Earth Connection science theme of the NASA Office of Space Science.

This program element supports research proposals relating to the analysis, interpretation, and theoretical modeling of data from the Advanced Composition Explorer (ACE) that was launched in August 1997. The prime objective of ACE is to determine and compare the elemental and isotopic composition of several distinct samples of matter, including the solar corona, the interplanetary medium, the local interstellar medium, and galactic matter. ACE consists of nine instruments, the:

- Solar Isotope Spectrometer (SIS),
- Cosmic Ray Isotope Spectrometer (CRIS),
- Ultra Low Energy Isotope Spectrometer (ULEIS),
- Solar Energetic Particle Ionic Charge Analyzer (SEPICA),
- Solar Wind Electron, Proton and Alpha Monitor (SWEPAM),
- Solar Wind Ion Composition Spectrometer (SWICS),
- Solar Wind Ion Mass Spectrometer (SWIMS),
- Electron, Proton and Alpha Monitor (EPAM), and
- Magnetic Field Monitor (MAG).

A description of these instruments can be found at the World Wide Web site: <http://www.gsfc.nasa.gov/ace/ace.html>. Papers providing a detailed description of the instruments can be obtained directly from the instrument Co-Investigators. It is strongly recommended that proposals to participate in analyzing data from one or more of the ACE instruments for a specific scientific investigation should include a plan that has been coordinated with the relevant lead Co-Investigators and affirms their cooperation if the proposed plan is accepted. Only data taken after February 1, 1998, when the mission begins its prime phase at L1, will be available to guest investigators. Current mission status, browse files, and other information is provided by the ACE Science Center at <http://www.srl.caltech.edu/ACE/ASC/>.

### 2. Programmatic Information

Proposals are solicited through this NRA from investigators who are not already funded as science team members for the experiments whose data they propose to use. Approximately $700K per year is expected to support guest investigations up to three

years in duration starting in Fiscal Year 1999. Note that this program element does not include investigations using Real Time Solar Wind Data, which should instead be proposed to the Sun-Earth Connection Guest Investigator Program (Section A.4.8 in this Appendix).

The schedules for submission of the Notice of Intent and proposal are given in Table 1 of the cover letter of this NRA. The World Wide Web site for submitting both the NOI and the *Cover Page/Proposal Summary* (see Appendix C.5.3) is <http://props.oss.hq.nasa.gov>; proposers without access to the Web or who experience difficulty in using this site may contact Ms. Debra Tripp (E-mail: deb.tripp@hq.nasa.gov) for assistance. Hard copies of the proposals are to be delivered to:

ROSS-98 NASA Research Announcement
ACE Guest Investigator Program
Jorge Scientific Corporation
Suite 700
400 Virginia Avenue, SW
Washington, DC 20024
Phone number for commercial delivery: (202) 554-2775

Question concerning this program element should be addressed to Discipline Scientist:

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